

## INTERNATIONAL SEARCH REPORT

International Application No.

PCT/EP 03/11271

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K31/44 A61K31/137 A61K31/704 A61K31/335 A61K31/4745  
A61P35/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, EMBASE, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>FAGIN J A: "Perspective: Lessons learned from molecular genetic studies of thyroid cancer: Insights into pathogenesis and tumor-specific therapeutic targets" ENDOCRINOLOGY, BALTIMORE, MD, US, vol. 143, no. 6, June 2002 (2002-06), pages 2025-2028, XP002251224 ISSN: 0013-7227</p> <p>page 2026, right-hand column, paragraph 2</p> <p style="text-align: center;">--- -/--</p>	1,11



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*&\* document member of the same patent family

Date of the actual completion of the international search

3 February 2004

Date of mailing of the international search report

26/02/2004

Name and mailing address of the ISA

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International Application No  
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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>LEVITZKI A: "Tyrosine kinases as targets for cancer therapy" EUROPEAN JOURNAL OF CANCER, PERGAMON PRESS, OXFORD, GB, vol. 38, September 2002 (2002-09), pages S11-S18, XP004402495 ISSN: 0959-8049 page S14, right-hand column figure 3</p> <p>---</p>	1,2,11
X	<p>SELLE B ET AL: "ABL-specific tyrosine kinase inhibitor imatinib as salvage therapy in a child with Philadelphia chromosome-positive acute mixed lineage leukemia (AMLL)" LEUKEMIA (BASINGSTOKE), vol. 16, no. 7, July 2002 (2002-07), pages 1393-1395, XP002268892 ISSN: 0887-6924 page 1394, right-hand column, last paragraph</p> <p>---</p>	1,2,11
X	<p>CAPDEVILLE R ET AL: "Imatinib: the first 3 years" EUROPEAN JOURNAL OF CANCER, PERGAMON PRESS, OXFORD, GB, vol. 38, September 2002 (2002-09), pages S77-S82, XP004402504 ISSN: 0959-8049</p> <p>page S79, right-hand column, paragraph 2 page D80, left-hand column, paragraph 2</p> <p>---</p>	1,2,10, 11
Y		1-11
X	<p>KANO Y ET AL: "IN VITRO CYTOTOXIC EFFECTS OF A TYROSINE KINASE INHIBITOR STI571 IN COMBINATION WITH COMMONLY USED ANTILEUKEMIC AGENTS" BLOOD, W.B.SAUNDERS COMPAGNY, ORLANDO, FL, US, vol. 97, no. 7, 1 April 2001 (2001-04-01), pages 1999-2007, XP001035243 ISSN: 0006-4971</p> <p>page 1999, abstract</p> <p>---</p>	1,2,10, 11
Y		1-11
X	<p>TOPALY J ET AL: "SYNERGISTIC ACTIVITY OF STI571 WITH CHEMOTHERAPEUTIC DRUGS AND IRRADIATION" BLOOD, W.B.SAUNDERS COMPAGNY, ORLANDO, FL, US, vol. 96, no. 11, PART 1, 1 December 2000 (2000-12-01), page 736A XP009010656 ISSN: 0006-4971 abstract</p> <p>---</p>	1-3,10, 11
	<p>---</p> <p>-/--</p>	

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 0 564 409 A (CIBA GEIGY AG) 6 October 1993 (1993-10-06) page 5, line 36 - line 38 ----	4
Y	US 5 521 184 A (ZIMMERMANN JUERG) 28 May 1996 (1996-05-28) column 7, line 44 - line 45 column 8, line 6 - line 7 column 9, line 1 - line 4 -----	4

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onal application No.  
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## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
  
Although claim 11 is directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the composition.
2. ☒ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  
  
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

## Continuation of Box I.2

Present claims 4 - 6 and 11 relate to a compound defined by reference to a desirable characteristic or property, namely "anticancer agent". The claims cover all compounds having this characteristic or property, whereas the application provides support within the meaning of Article 6 PCT and disclosure within the meaning of Article 5 PCT for only a very limited number of such compounds. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Independent of the above reasoning, the claims also lack clarity (Article 6 PCT). An attempt is made to define the compound by reference to a result to be achieved. Again, this lack of clarity in the present case is such as to render a meaningful search over the whole of the claimed scope impossible. Consequently, the search has been carried out for those parts of the claims which appear to be clear, supported and disclosed, namely those parts relating to the following compounds: mitoxanthrone, doxorubicin, topotecan, irinotecan, 7-ethyl-10-hydroxycamptothecin, 9-amino-camptothecin, 9-nitrocarnptothecin, lurtotecan, diflomotecan, BAY38-3441, BNP1350, DB67, CT2016, DE310, T-0128 and prothecan (page 5 of the description).

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

# INTERNATIONAL SEARCH REPORT

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0564409	A	06-10-1993	AT 188964 T 15-02-2000
		AU 3569493 A 07-10-1993	
		BR 1100739 A3 06-06-2000	
		CA 2093203 A1 04-10-1993	
		CN 1077713 A ,B 27-10-1993	
		CY 2229 A 18-04-2003	
		CZ 9300560 A3 16-02-1994	
		DE 59309931 D1 24-02-2000	
		DK 564409 T3 19-06-2000	
		EP 0564409 A1 06-10-1993	
		ES 2142857 T3 01-05-2000	
		FI 931458 A 04-10-1993	
		GR 3032927 T3 31-07-2000	
		HU 64050 A2 29-11-1993	
		IL 105264 A 11-04-1999	
		JP 2706682 B2 28-01-1998	
		JP 6087834 A 29-03-1994	
		KR 261366 B1 01-08-2000	
		LU 90908 A9 30-04-2003	
		MX 9301929 A1 29-07-1994	
		NO 931283 A 04-10-1993	
		NZ 247299 A 26-07-1995	
		PT 564409 T 30-06-2000	
		RU 2125992 C1 10-02-1999	
		SG 43859 A1 14-11-1997	
		SK 28093 A3 06-04-1994	
		US 5521184 A 28-05-1996	
		ZA 9302397 A 04-10-1993	
US 5521184	A	28-05-1996	AT 188964 T 15-02-2000
		AU 3569493 A 07-10-1993	
		BR 1100739 A3 06-06-2000	
		CA 2093203 A1 04-10-1993	
		CN 1077713 A ,B 27-10-1993	
		CY 2229 A 18-04-2003	
		CZ 9300560 A3 16-02-1994	
		DE 59309931 D1 24-02-2000	
		DK 564409 T3 19-06-2000	
		EP 0564409 A1 06-10-1993	
		ES 2142857 T3 01-05-2000	
		FI 931458 A 04-10-1993	
		GR 3032927 T3 31-07-2000	
		HU 64050 A2 29-11-1993	
		IL 105264 A 11-04-1999	
		JP 2706682 B2 28-01-1998	
		JP 6087834 A 29-03-1994	
		KR 261366 B1 01-08-2000	
		LU 90908 A9 30-04-2003	
		MX 9301929 A1 29-07-1994	
		NO 931283 A 04-10-1993	
		NZ 247299 A 26-07-1995	
		PT 564409 T 30-06-2000	
		RU 2125992 C1 10-02-1999	
		SG 43859 A1 14-11-1997	
		SK 28093 A3 06-04-1994	
		ZA 9302397 A 04-10-1993	
		AU 693804 B2 09-07-1998	
		AU 7697594 A 01-05-1995	

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5521184	A	CA 2148477 A1	13-04-1995
		WO 9509852 A1	13-04-1995
		EP 0672040 A1	20-09-1995
		JP 8504834 T	28-05-1996
		US 5543520 A	06-08-1996

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